

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) Procedure for detecting and classifying impurities in longitudinally moving inspection material of textile fibres fibers, characterized in that comprising the following steps,
for at least two properties that are influenced by impurities, measuring values ~~(4, 5, 43b)~~ for deviations of these properties from a respective standard value ~~(43)~~ are measured and stored storing said vaues in memory, eliminating the values ~~(4)~~ for the deviations ~~are eliminated~~ according to a predefined rule except for values of one property, ascertaining a value ~~(5)~~ for the deviation, resulting from values of the remaining property, and a value ~~(45)~~ for the length of the deviation on the inspection material ~~are ascertained~~, and classifying the impurity ~~is classified~~ according to this said deviation and length values.
2. (Currently Amended) Procedure according to Claim 1, ~~characterized in that~~ wherein, for three properties, values ~~(25, 26, 27)~~ for deviations are ascertained and stored in memory, and values for two properties ~~(26, 27)~~ are eliminated.

3. (Currently Amended) Procedure according to Claim 1, ~~characterized in that~~ wherein a combined value ~~(6, 28)~~ is first ascertained from the values for the deviations of the properties, and ~~there are predefined~~ further including the steps of predefining, for the combined value, domains ~~(8, 9, 31-39)~~ in which such values can be located, and ~~determination of~~ determining values of which property are to be eliminated ~~is effected~~ on the basis of a domain in which the combined value is located.
4. (Currently Amended) Procedure according to Claim 1, ~~characterized in that~~ wherein the deviations are conceived as vectors ~~(25-27)~~, a total vector ~~(28)~~ is obtained, as a combined value, from the deviations, and domains ~~(31-39)~~ are predefined for the end-point ~~(29)~~ of the total vector in the space.
5. (Currently Amended) Procedure according to Claim 1, ~~characterized in that~~ wherein, in order to measure values for the properties, the inspection material is illuminated with light having a plurality of colours, the reflection of the light is measured separately for each colour, and measured values are compared with standard values and stored in memory as deviations, and further wherein the deviations are conceived as vectors ~~(25-27)~~ in a space ~~(30)~~,

a total vector (28) is obtained, as a combined value, from the deviations, domains (31—39) are predefined for the end-point (29) of the total vector in the space, depending on the domain in which the end-point is located, at least one first vector (26) is eliminated, and from the value of a remaining vector (25), an intensity is ascertained which is classified together with the value for the length (45) of the deviation on the inspection material.

6. (Currently Amended) Procedure according to Claim 1, ~~characterized in that~~ wherein the deviations are ascertained with the use of threshold values (44).
7. (Currently Amended) Procedure according to Claim 1, ~~characterized in that~~ wherein the impurities are classified in a coordinate system (13) which has an axis (14) for values of the length of the deviation and an axis (15) for values for the magnitude of the deviation.
8. (Currently Amended) Procedure according to Claim 1, ~~characterized in that~~ the wherein at least one axis (15) is divided into a plurality of sections for values for different properties.